

BIBLIOGRAPHY

Peer-reviewed journal articles

1. García de Herreros A, **Dominguez I**, Diaz-Meco MT, Graziani G, Cornett ME, Guddal PH, Johansen T, Moscat J. Requirement of phospholipase C-catalyzed hydrolysis of phosphatidylcholine for maturation of *Xenopus laevis* oocytes in response to insulin and ras p21. *J Biol Chem*. 1991; 266(11):6825-9
2. **Dominguez I**, Marshall MS, Gibbs JB, García de Herreros A, Cornet ME, Graziani G, Diaz-Meco MT, Johansen T, McCormick F, Moscat J. Role of GTPase activating protein in mitogenic signalling through phosphatidylcholine-hydrolysing phospholipase C. *EMBO J* 1991; 10(11):3215-20
3. Diaz-Meco MT, **Dominguez I** (*Co-first author*), Sanz L, Municio MM, Berra E, Cornet ME, Garcia de Herreros A, Johansen T, Moscat J. Phospholipase C-mediated hydrolysis of phosphatidyl-choline is a target of transforming growth factor beta 1 inhibitory signals. *Mol Cell Biol* 1992; 12(1):302-8
4. **Dominguez I**, Diaz-Meco MT, Municio MM, Berra E, García de Herreros A, Cornet ME, Sanz L, Moscat J. Evidence for a role of protein kinase C ζ subspecies in maturation of *Xenopus laevis* oocytes. *Mol Cell Biol* 1992; 12(9):3776-83
5. **Dominguez I** (*Co-first author*), Sanz L, Arenzana-Seisdedos F, Diaz-Meco MT, Virelizier JL, Moscat J. Inhibition of protein kinase C ζ subspecies blocks the activation of an NF-kappa B-like activity in *Xenopus laevis* oocytes. *Mol Cell Biol* 1993; 13(2):1290-5
6. Berra E, Diaz-Meco MT, **Dominguez I** (*Co-first author*), Municio MM, Sanz L, Lozano J, Chapkin RS, Moscat J. Protein kinase C ζ isoform is critical for mitogenic signal transduction. *Cell* 1993; 74(3):555-63
7. Arenzana-Seisdedos F, Fernandez B, **Dominguez I**, Jacqué JM, Thomas D, Diaz-Meco MT, Moscat J, Virelizier JL. Phosphatidylcholine hydrolysis activates NF- κ B and increases human immunodeficiency virus replication in human monocytes and T lymphocytes. *J Virol* 1993; 67(11):6596-604
8. Diaz-Meco MT, Berra E, Municio MM, Sanz L, Lozano J, **Dominguez I**, Diaz-Golpe V, Lain de Lera MT, Alcamí J, Payá CV, Moscat J. A dominant negative protein kinase C ζ subspecies blocks NF-kappa B activation. *Mol Cell Biol* 1993; 13(8):4770-5
9. Diaz-Meco MT, **Dominguez I** (*Co-first author*), Sanz L, Dent P, Lozano J, Municio MM, Berra E, Hay RT, Sturgill TW, Moscat J. ζ PKC induces phosphorylation and inactivation of I kappa B-alpha *in vitro*. *EMBO J* 1994; 13(12):2842-8
10. Lozano J, Berra E, Municio MM, Diaz-Meco MT, **Dominguez I**, Sanz L, Moscat J. Protein kinase C ζ isoform is critical for kappa B-dependent promoter activation by sphingomyelinase. *J Biol Chem* 1994; 269(30):19200-2
11. Sanz L, Berra E, Municio MM, **Dominguez I**, Lozano J, Johansen T, Moscat J, Diaz-Meco MT. ζ PKC plays a critical role during stromelysin promoter activation by platelet-derived growth factor through a novel palindromic element. *J Biol Chem* 1994; 269(13):10044-9
12. Martínez-Gimeno C, Díaz-Meco MT, Domínguez I, Moscat J. Alterations in levels of different protein kinase C isotypes and their influence on behavior of squamous cell carcinoma of the oral cavity: epsilon PKC, a novel prognostic factor for relapse and survival. *Head Neck*. 1995; 17(6):516-25

13. **Dominguez I** (*Co-first author*), Itoh K, Sokol SY. Role of glycogen synthase kinase-3 β as a negative regulator of dorsoventral axis formation in *Xenopus* embryos. *Proc Natl Acad Sci USA* 1995; 92(18): 8498-502
14. **Dominguez I**, Green JB. Dorsal downregulation of GSK3 β by a non-Wnt-like mechanism is an early molecular consequence of cortical rotation in early *Xenopus* embryos. *Development* 2000; 127(4): 861-8
- These results on Wnt/ β -catenin signaling in *Xenopus* early development are included in the textbook “*Analysis of Biological Development*” by Klaus Kalthoff, published by McGraw-Hill.
15. Song DH, **Dominguez I**, Mizuno J, Kaut M, Mohr S"C, Seldin DC. CK2 Phosphorylation of the armadillo repeat region of β -catenin potentiates Wnt signaling *J Biol Chem* 2003; 278(26):24018-25
16. **Dominguez I** (*Corresponding author*), Mizuno J, Wu H, Song DH, Symes K, Seldin DC. Protein kinase CK2 is required for dorsal axis formation in *Xenopus* embryos. *Dev Biol* 2004; 274(1):110-24
17. Green JB, **Dominguez I**, Davidson LA. Self-organization of vertebrate mesoderm based on simple boundary conditions. *Dev Dyn* 2004; 231(3):576-81
18. Farago M, **Dominguez I**, Landesman-Bollag E, Xu X, Rosner A, Cardiff RD, Seldin DC. Kinase inactive GSK3 β promotes Wnt signaling and mammary tumorigenesis. *Cancer Research* 2005; 65(13):5792-801
19. Currier N, Solomon SE, Demicco EG, Chang DL, Farago M, Ying H, **Dominguez I**, Sonenshein GE, Cardiff RD, Xiao ZX, Sherr DH, Seldin DC. Oncogenic signaling pathways activated in DMBA-induced mouse mammary tumors *Toxicologic Pathology* 2005; 33(6):726-37
20. **Dominguez I** (*Corresponding author*), Mizuno J, Wu H, Imbrie GA, Symes K, Seldin DC. A role for CK2 α/β in *Xenopus* early embryonic development, *Mol Cell Biochem* 2005; 274(1-2):125-31
21. Seldin DC (*Corresponding author*), Landesman-Bollag E, Farago M, Currier N, Lou D, **Dominguez I**. CK2 as a positive regulator of Wnt signaling and tumorigenesis. *Mol Cell Biochem*. 2005; 274(1-2):63-7
22. Lou DY, **Dominguez I**, Toselli P, Landesman-Bollag E, O'Brien C, Seldin DC. The alpha catalytic subunit of protein kinase CK2 is required for normal embryonic development *Mol Cell Biol*. 2008; 28(1):131-9
23. Chitalia VC, Foy RL, Bachschmid MM, Zeng L, Panchenko MV, Zhou MI, Bharti A, Seldin DC, Lecker SH, **Dominguez I**, Cohen HT. Jade-1 inhibits Wnt signaling by ubiquitinating beta-catenin and mediates Wnt pathway inhibition by pVHL. *Nat Cell Biol*. 2008; 10(10):1208-16
24. Bryja V., Schambony A., Čajánek L., **Dominguez I.**, Arenas, E. Schulte G. β -arrestin and casein kinase 1/2 define distinct branches of non-canonical WNT signaling pathways. *EMBO Rep*. 2008; 9(12):1244-50
25. Seldin DC (*Corresponding author*), Lou DY, Toselli P, Landesman-Bollag E, **Dominguez I**. Gene targeting of CK2 catalytic subunits. *Mol Cell Biochem*. 2008; 316 (1-2):141-7
26. Wu H, Symes K, Seldin DC, **Dominguez I**. Threonine 393 of β -catenin regulates interaction with Axin. *J Cell Biochem*. 2009; Sep 1;108(1):52-63
27. Currier N., Chea K., Hlavacova M., Sussman D.J., Seldin D.C. **Dominguez I**. Dynamic expression of a LEF-EGFP Wnt reporter in mouse development and cancer. *Genesis* 2010 Mar; 48(3): 183-94

28. **Dominguez I** (*Corresponding author*), Degano IR, Chea K, Toselli P, Seldin DC. CK2α is Essential for Embryonic Morphogenesis. *Mol Cell Biochem*. 2011 Oct; 356(1-2): 209-16
29. Imbrie, G.A., Wu H., Seldin, D.C. **Dominguez, I.** Asymmetric localization of CK2α during *Xenopus* oogenesis *Human Genet Embryol* 2012; S4:001
30. Papanicolaou K.N., Kikuchi R., Ngoh G.A., Coughlan K.A., **Dominguez I.**, Stanley W.C., Walsh K. Mitofusins 1 and 2 are essential for postnatal metabolic remodeling in heart. *Circ. Res.* 2012; 111(8):1012-26.
31. Iskratsch T., Reijntjes S., Dwyer, J., Toselli P., Degano I.R., **Dominguez I.** and Ehler E. Two distinct phosphorylation events govern the function of muscle FHOD3. *Cell Mol Life Sci.* 2013, 70(5):893-908.
32. Siriwardana NS, Meyer R, Havasi A, Dominguez I, Panchenko MV. Cell cycle-dependent chromatin shuttling of HBO1-JADE1 histone acetyl transferase (HAT) complex. *Cell Cycle*. 2014 Apr 16;13(12).
33. Ortega C, Seidner Y, and **Dominguez I.** Mining CK2 in cancer. *PLOS ONE*. 2014 Dec 26;9(12):e115609
34. Marivin, A., Leyme, A., Parag-Sharma, K., DiGiacomo, V., Cheung, A.Y., Nguyen L.T., **Dominguez, I.**, Garcia-Marcos, M. Dominant negative Gα subunits as a novel mechanism of trimeric G protein signaling dysregulation in human disease *Science Signaling* 2015 (accepted for publication)

Submitted or in preparation

- Chua, M., **Dominguez I.** CK2 transcript expression in cancer (in preparation)
- Yoon, N., Allahua, M., Oliveiro M, Surjadevara J, **Dominguez I.** CK2α/β expression in late *Xenopus laevis* embryos (in preparation)
- **Dominguez, I.** CK2α is essential for canonical Wnt signaling in mammalian embryos (in preparation)
- Wu, H, **Dominguez, I.** Novel role for CK2α in Wnt/β-catenin signaling. (in preparation)
- Allahua, M., Ferri, G., **Dominguez I** Animal localization in *Xenopus laevis* oocytes (in preparation)
- Degano IR, Cha J, Chea K, Hlavacova M, Revuelta-Cervantes J, Macias L, Kalla P, Toselli P, **Dominguez I.** CK2α is required for cell proliferation in the mouse embryonic heart. *Dev Dyn.* (second revision).
- Mizuno, J, Surjadevara J, **Dominguez I.** CK2α/β expression in early *Xenopus laevis* embryos (in preparation)
- Dominguez, I, Perea S, CK2: biochemically pleiotropic, biologically specialized (in preparation)

Reviews and Invited Reviews:

1. **Dominguez I**, Green JB. Missing links in GSK3 regulation. *Dev Biol* 2001; 235(2):303-13
2. **Dominguez I**, Sonenshein GE, Seldin DC. CK2 and its Role in Wnt and NF-κB Signaling: Linking Development and Cancer. *Cell. Mol. Life Sci.* 2009; Jun;66(11-12):1850-7.

Book Chapters:

1. Revuelta-Cervantes, J, Macias Alvarez, L., **Dominguez I.** CK2 in embryonic development. The Wiley-IUBMB Series on Biochemistry and Molecular Biology: Protein Kinase CK2. Editor: Lorenzo Pinna. Wiley-Blackwell Publishing. John Wiley & Sons, Inc (2012)

2. Ortega C, Prince-Wright L, **Dominguez I.** Role of CK2 in organ formation. Advances in Biochemistry in health and Disease: protein Kinase CK2 cellular function in normal and disease stages. Editors Khalil Ahmed, Olaf Issinger and Ryszard Szyska (2014)
3. Apfel J., Parikh J.R., Reischmann P., Ewing R.M., Müller O, Xia Y, **Dominguez I.** The Wnt signaling network in Cancer. Systems Biology of Cancer. Editor: Sam Thiagalingam. Cambridge University Press (2015).